

ABSTRACT

A sorbent composition is provided which can be used in the desulfurization of a hydrocarbon-containing fluid such as cracked gasoline or diesel fuel. The sorbent composition contains a support component and a promoter component with the promoter component being present as a skin on said support component. Such sorbent composition is prepared by a process of impregnating a support component with a promoter component, wherein the promoter component has been melted under a melting condition, followed by drying, calcining, and reducing to thereby provide the sorbent composition. A process for the removal of sulfur from a hydrocarbon stream, wherein the hydrocarbon stream is a combination of cracked gasoline and diesel fuel, is also disclosed.